

REMARKS/ARGUMENTS

SPECIFICATION

In the specification, page 4, paragraph 2 has been amended to add a definition of the acronym “DSCP” where the referred to term “differentiated services codepoint” is first used.

STATUS OF CLAIMS

Claims 1-22 remain in this application. Claims 1-4 and 6-22 have been amended to further clarify the meaning already extant in the claims.

CLAIM REJECTIONS – 35 U.S.C. § 112 ¶ 1

1. The Office Action rejected Claims 2, 3, 8, 9, 13, 14, 20, and 21 under 35 U.S.C. § 112 ¶ 1 as failing to comply with the enablement requirement. The rejection is respectfully traversed.

The specification has been amended to define the term “DSCP” where the referred to term “differentiated services codepoint” is first used, page 4, paragraph 2. With this definition, Claims 2, 3, 8, 9, 13, 14, 20, and 21 are fully supported in the specification and comply with 35 U.S.C. § 112 ¶ 1.

2. The Office Action rejected Claims 5, 6, 11, 16, and 22 under 35 U.S.C. § 112 ¶ 1 as failing to comply with the enablement requirement. The rejection is respectfully traversed.

A person having ordinary skill in the art would have known and will know what the term "RSVP PATH" means since this term is defined in the Internet Engineering Task Force (IETF) Request For Comments (RFC) for RSVP: "Resource ReSerVation Protocol (RSVP): Version 1 Functional Specification", IETF RFC 2205, September 1997. A copy of RFC 2205 is provided in an Information Disclosure Statement filed concurrently herewith. As this term is known to one with ordinary skill in the art, Claims 5, 6, 11, 16, and 22 comply with 35 U.S.C. § 112 ¶ 1.

CLAIM REJECTIONS – 35 U.S.C. § 102

3. The Office Action rejected Claims 1-17 and 19-22 under 35 U.S.C. § 102(e) as allegedly unpatentable over US Patent No. 6,118,760 granted to Zaumen et al. ("Zaumen"). The rejection is respectfully traversed.

Anticipation under 35 U.S.C. § 102 requires a reference to teach or disclose each and every element, limitation, or step of a claim. Since Claims 1-17 and 19-22 each include at least one element not found in Zaumen, the Zaumen patent does not anticipate Claims 1-17 and 19-22 under 35 U.S.C. § 102.

Although Claims 1, 7, 12, and 17 are not the same, because the Office Action has applied the same reasoning for each of Claims 1, 7, 12, and 17, the following remarks will consider all of these claims together.

The Office Action contends that the Zaumen patent teaches the features of a network flow of data packets that is examined by the packet header for evaluation against QOS requirements stored in memory 114, where a packet will be forwarded based on the association of data out of the inbound system (column 5, lines 47-

54), with entries that can be made to the memory for the priority and QOS (column 6, lines 38-42, and column 10, lines 8-20).

The features of Claims 1, 7, 12, and 17, however, are not taught by the Zaumen patent. Claims 1, 7, 12, and 17 have been amended to further clarify meaning already extant in the claims.

The Zaumen patent teaches a method for obtaining QOS information, storing QOS information in a memory associated with a unidirectional dataflow, and applying the QOS information to messages associated with the unidirectional dataflow.

Therefore, and in particular, the Zaumen patent does not teach the features of 1) receiving a bidirectional network data flow comprising at least one outbound message element that is associated with an outbound quality of service treatment value; 2) creating and storing an inbound quality of service value in association with information identifying the bidirectional network data flow; 3) receiving one or more inbound message elements; 4) determining that the inbound message elements are associated with the same bidirectional network data flow; and 5) applying the inbound quality of service value to the inbound message elements based on the stored information.”

The Office Action alleges that Zaumen column 5, lines 47-54, column 6, lines 38-42, and column 10, lines 8-20 teaches features 1) – 5). Below is a discussion of each of these features.

Specifically regarding feature 1), there is no mention of a bidirectional dataflow and therefore, necessarily, no concept of *outbound* message elements is taught. Therefore, the Zaumen patent does not teach feature 1).

Specifically regarding feature 2), there is no mention of a bidirectional dataflow in the Zaumen patent and there is also no concept of *inbound* quality of service value.

Because this concept is lacking, the Zaumen patent could not teach storing an inbound quality of service value in association with information identifying the bidirectional network data flow. Therefore, the Zaumen patent does not teach feature 2).

Specifically regarding feature 3), the Zaumen patent does not teach *inbound* message elements, and therefore, could not teach the concept of receiving one or more inbound message elements. Therefore, the Zaumen patent does not teach feature 3).

Specifically regarding feature 4), the Zaumen patent does not teach *inbound* message element or a *bidirectional* dataflow. Therefore, the Zaumen patent does not teach feature 4): determining that the inbound message elements are associated with the same bidirectional network data flow.

Specifically regarding feature 5), the Zaumen patent does not teach *inbound* quality of service values or *inbound* message elements. Therefore, the Zaumen patent does could not teach feature 5): applying the inbound quality of service value to the inbound message elements based on the stored information.

Various embodiments of Claims 1, 7, 12, and 17 have numerous improvements over the prior art. Among these improvements is automatically applying bi-directional quality of service treatment to network data flows, one part of which includes providing QOS values to inbound messages associated with a bidirectional data flow – even when those messages have no QOS value of their own. Consider this example: a message is sent from a server S, which can set QOS values for messages, to a client C, which cannot set QOS values, as part of bidirectional data flow B, which has a QOS associated with it. When C sends a reply to the S, C cannot specify a QOS value itself. However, various embodiments of Claims 1, 7, 12, and 17 determine an inbound QOS value for the inbound messages (from C to S) in the bidirectional data flow B and set the inbound QOS

for messages sent from C to S associated with B. Zaumen does not teach any such embodiments.

As Zaumen does not teach or disclose the cited features, Applicant respectfully requests reconsideration and withdrawal of the rejection of Claims 1, 7, 12, and 17.

4. Claims 2-6, 8-11, 13-14, and 15-16 were rejected in the Office Action and each depends directly or indirectly from Claims 1, 7, 12, and 17 and further limit Claims 1, 7, 12, and 17. The dependent claims also incorporate each and every feature of the independent claim from which they depend. Since independent Claims 1, 7, 12, and 17 are allowable, as discussed above, Claims 2-6, 8-11, 13-14, and 15-16 are also allowable. In addition, each of these dependent Claims 2-6, 8-11, 13-14, and 15-16 each independently introduce one or more limitations that independently render them patentable over the prior art of record.

For example, regarding Claim 2, the Zaumen patent does not teach the concepts of a bidirectional data flow, an outbound message, or an inbound quality of service value. Therefore, the Zaumen patent could not teach or disclose that receiving a bidirectional network data flow comprises receiving a bidirectional network data flow comprising at least one outbound message element that is marked with a DSCP value and wherein applying the inbound quality of service value comprises marking the inbound message elements with the DSCP value.

5. Regarding Claim 19, the Office Action states that the Zaumen patent teaches the features of Claim 19 at column 5, lines 47-54, column 6, lines 38-42, column 10, lines 8-20; and column 5, lines 36-39. This is incorrect.

The Zaumen patent teaches a method for obtaining QOS information, storing QOS information in a memory associated with a unidirectional dataflow, and applying the QOS information to messages associated with the unidirectional dataflow.

The Zaumen patent does not teach the features of 1) creating and storing a hash entry in a hash table of a network device that uniquely identifies an inbound quality of service value in association with information identifying a bidirectional network data flow based on an outbound quality of service value that is in at least one outbound message element that is associated with an outbound quality of service treatment value; 2) receiving one or more inbound message elements; 3) determining that the inbound message elements are associated with the same bidirectional network data flow; and 4) applying the inbound quality of service value to the inbound message elements based on the stored information.

Specifically regarding feature 1), Zaumen does not teach or disclose bidirectional dataflow, outbound message element, outbound QOS value, or inbound QOS value. Therefore, the Zaumen patent could not teach feature 1). Regarding features 2), 3), and 4), the Zaumen patent fails to teach, disclose, or suggest such features for the same reasons given above with respect to Claims 1, 7, 12, and 17. As Zaumen does not teach or disclose the cited features, Applicant respectfully requests reconsideration and withdrawal of the rejection of Claim 19.

6. Claims 20-22 were rejected in the Office Action and each depends directly or indirectly from Claim 19 and further limit Claim 19. The dependent claims also incorporate each and every feature of the independent claim from which they depend. Since independent Claim 19 is allowable, as discussed above, Claims 20-22 are allowable. In addition, each of these dependent Claims 20-22 each independently introduce one or more limitations that independently render them patentable over the prior art of record.

For example, regarding Claim 20, the Zaumen patent does not teach the concepts of bidirectional data flow, outbound message, or inbound quality of service value. Therefore, the Zaumen patent could not teach or disclose that the bidirectional network data flow comprises at least one outbound message element that is marked with a DSCP value and wherein applying the inbound quality of service value comprises marking the inbound message elements with the DSCP value.

CLAIM REJECTIONS – 35 U.S.C. § 103

7. Claim 18 was rejected under 35 U.S.C. §103 as allegedly unpatentable over Zaumen in view of Aukia et al, U.S. Patent No. 6,594,268. The rejection is respectfully traversed.

Regarding Claim 18, the Office Action states that the Zaumen patent teaches all of the features of Claim 18, except for a plurality of links on the network communicating the process used for QOS and data flow communication. The Office Action does not specifically cite which sections of the Zaumen patent teach these limitations. This is required under MPEP 707(c)(2):

(2) In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions

other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

The Applicants, however, have thoroughly reviewed the Zaumen patent and find that it does not teach the features of Claim 18 proposed in the Office Action.

The Office Action further states that Zaumen in view of Aukia teaches all of the limitations of Claim 18 including the limitations of a plurality of links on the network communicating the process used for QOS and data flow communication at column 4, lines 58-67 and that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined these two references. This is incorrect.

The Zaumen patent teaches a method for obtaining QOS information, storing QOS information in a memory associated with a unidirectional dataflow, and applying the QOS information to messages associated with the unidirectional dataflow.

The Aukia patent at column 4, liens 58-67 teaches a method for generating new routing paths in a packet network for unidirectional packet flows in response to changes in routing topology and QOS information.

Neither the Zaumen patent nor the Aukia patent teach any of the features of bidirectional network data flow, outbound message element, outbound quality of service treatment, inbound message element, or inbound quality of service treatment. Therefore, Zaumen in view of Aukia could not teach the features of Claim 18: 1) a router coupled to the first end station and capable of routing the message elements among the first end station and the other end stations and automatically applying quality of service treatments to the data flows, and comprising a memory configured to store information identifying the data flows and an inbound quality service value associated with each of the data flows, and a stored program that can access the information in the memory and which,

when executed by the router apparatus, carries out the steps of: A) receiving a bidirectional network data flow directed from one of the other end stations to the first end station and comprising at least one outbound message element that is associated with an outbound quality of service treatment value; B) creating and storing an inbound quality of service value in association with information identifying the bidirectional network data flow; C) receiving one or more inbound message elements; D) determining that the inbound message elements are associated with the same bidirectional network data flow; and E) applying the inbound quality of service value to the inbound message elements based on the stored information.

As Zaumen does not teach or disclose the cited features 1), A)-D), Applicant respectfully requests reconsideration and withdrawal of the rejection of Claim 18.

MISCELLANEOUS

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

The Applicant believes that all issues raised in the Office Action have been addressed and that allowance of the pending claims is appropriate. Entry of the amendments herein and further examination on the merits are respectfully requested.

The Examiner is invited to telephone the undersigned at (408) 414-1080 to discuss any issue that may advance prosecution.

No fee is believed to be due specifically in connection with this Reply. To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. § 1.136. The Commissioner is authorized to charge any fee that may be due in connection with this Reply to our Deposit Account No. 50-1302.

Respectfully submitted,

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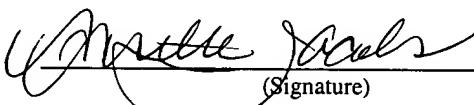
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No Attachments

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